

Appl. No. 09/751,427
Amdt. dated July 16, 2004
Reply to Office Action of April 16, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (cancelled)

2. (currently amended):

The device of claim ~~1~~, 26, wherein the first power management state and the second power management state each comprises a set of power management states.

3. (currently amended):

The apparatus of claim ~~1~~, 26, wherein:

the switchable first-peripheral device is capable of operating as a conventional peripheral device when coupled to the bus as the slave device.

4. (currently amended):

The apparatus of claim ~~1~~, 26, wherein:

the switchable first-peripheral device is capable of operating as the default bus master for the ~~computer~~ without assistance from the first default master CPU.

5. (currently amended):

The apparatus of claim 4, wherein the switchable first-peripheral device causes the apparatus ~~configurable link~~ to couple the switchable first-peripheral device to the bus as the default bus master when the first default master CPU is in ~~a~~ the second power management state.

6. (currently amended):

The apparatus of claim ~~1~~, 26, wherein the first default master computer's CPU is in a sleeping state in the second power management state.

7. (currently amended):

The apparatus of claim ~~1~~, 26, wherein the second power management state includes power modes S3-S5 as defined in the Advanced Configuration and Power Interface (ACPI) specification.

8. (currently amended):

The apparatus of claim ~~1~~, 26, wherein the transfer rate over the ~~configurable link~~ bus when the switchable first-peripheral device is the default bus master is different than when the first default master computer's CPU is the default bus master.

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9-14. (cancelled)

15. (currently amended):

The method of claim ~~14~~, 27, wherein the switchable first-peripheral device is capable of operating as the default bus master ~~for the computer~~ without assistance from the first default master CPU.

16. (currently amended):

The method of claim 15, wherein the switchable first-peripheral is capable of operating as a conventional peripheral device when coupled to the bus as the slave device.

17. (currently amended):

The method of claim ~~14~~, 27, wherein the first default master computer's CPU is in a sleeping state in the second power management state.

18. (currently amended):

The method of claim ~~14~~, 27, wherein the second power management state includes power modes S3-S5 as defined in the Advanced Configuration and Power Interface (ACPI) specification.

19. (currently amended):

The method of claim ~~14~~, 27, wherein the switchable first-peripheral device causes the configurable link to couple the switchable first-peripheral device to the bus as the default bus master when the first default master CPU is in a second power management state.

20. (cancelled)

21. (currently amended):

A system, comprising:

a sub-system to couple a plurality of slave peripheral devices to a bus;

a sub-system to couple a first default master to the plurality of slave peripheral devices through the bus;

a sub-system to detect the power management state of the first default master; a central processor;

a sub-system to determine whether the first default master central processor is in a first power management state or a second power management state;

a sub-system to couple the first default master central processor to the bus as a default bus master and to couple a switchable first-peripheral device to the bus as a slave device if the first default master central processor is in a first power management state; and

a sub-system to couple the switchable first-peripheral device to the bus as the default bus master if the first default master central processor is in a second power management state.

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22. (currently amended):

The system of claim 21, further comprising:

a sub-system to initiate a data transfer from the switchable first peripheral device if the first default master central processor is in the second power management state.

23. (currently amended):

The system of claim 21, further comprising:

a sub-system to buffer data at the switchable first peripheral device if the first default master central processor is in the second power management state.

24. (currently amended):

The system of claim 21, further comprising:

a sub-system to allow the switchable first peripheral device to directly access and communicate with a second peripheral device without assistance from the first default master central processor.

25. (currently amended):

The system of claim 21, further comprising:

a sub-system to delay the first default master central processor from transitioning from the second power management state to the first power management state.

26. (new):

An apparatus comprising:

a plurality of slave interfaces configured to couple a plurality of slave peripheral devices to a bus;

a master interface coupled to the plurality of slave interfaces, the master interface configured to couple a first default master to the plurality of slave peripheral devices through the bus; and

a switchable interface coupled to the plurality of slave interfaces and the master interface, the switchable interface configured to

couple a switchable peripheral device to the first default master through the bus as a slave device when the first default master is in a first power management state, and

couple the switchable peripheral device to the plurality of slave peripheral devices through the bus as a second default master when the first default master is a second power management state.

27. (new):

A method comprising:

coupling a plurality of slave peripheral devices to a bus;

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coupling a first default master to the plurality of slave peripheral devices through the bus;
coupling a switchable peripheral device to the first default master through the bus as a
slave device when the first default master is in a first power management state; and
coupling the switchable peripheral device to the plurality of slave peripheral devices
through the bus as a second default master when the first default master is a second
power management state.